# DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

#### LAKE TROPHIC DATA

### **MORPHOMETRIC:**

Lake: DAMON RESERVOIR, UPPER	Lake Area (ha):	29.91
Town: RINDGE	Maximum depth (m):	1.2
County: Cheshire	Mean depth (m):	0.5
River Basin: Connecticut	Volume (m³):	155000
Latitude: 42°44' N	Relative depth:	0.2
Longitude: 72°05' W	Shore configuration:	
Elevation (ft): 913	Areal water load (m/yr):	49.58
Shore length (m):	Flushing rate (yr <sup>-1</sup> ):	95.70
Watershed area (ha): 2720.5	P retention coeff.:	0.36
	Lake type: natural	

27 January 1988	9 September 1987
NO SAMPLE COLLECTED	NO SAMPLE COLLECTED
	1640.0
	12.45
NO SAMPLE COLLECTED	NO SAMPLE COLLECTED
	Common
	1.2
13.3	6.1
	< 10
	NO SAMPLE COLLECTED  NO SAMPLE COLLECTED

## SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None

CHEMICAL:

Lake: DAMON RESERVOIR, UPPER
Town: RINDGE

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	27 January 1988		9 September 1987	
DEPTH (m)	1.0		0.5	
pH (units)	5.3		5.6	
A.N.C. (Alkalinity)	1.4		1.1	
NITRATE NITROGEN	0.12		0.07	
TOTAL KJELDAHL NITROGEN	0.57		0.34	
TOTAL PHOSPHORUS	0.024		0.040	
CONDUCTIVITY (p mhos/cm)	72.6		52.8	
APPARENT COLOR (cpu)	95		104	
MAGNESIUM			0.48	
CALCIUM			1.6	
SODIUM			6.9	
POTASSIUM			0.60	
CHLORIDE	14		5	
SULFATE	6		< 1	
TN : TP	29		10	
CALCITE SATURATION INDEX			5.5	

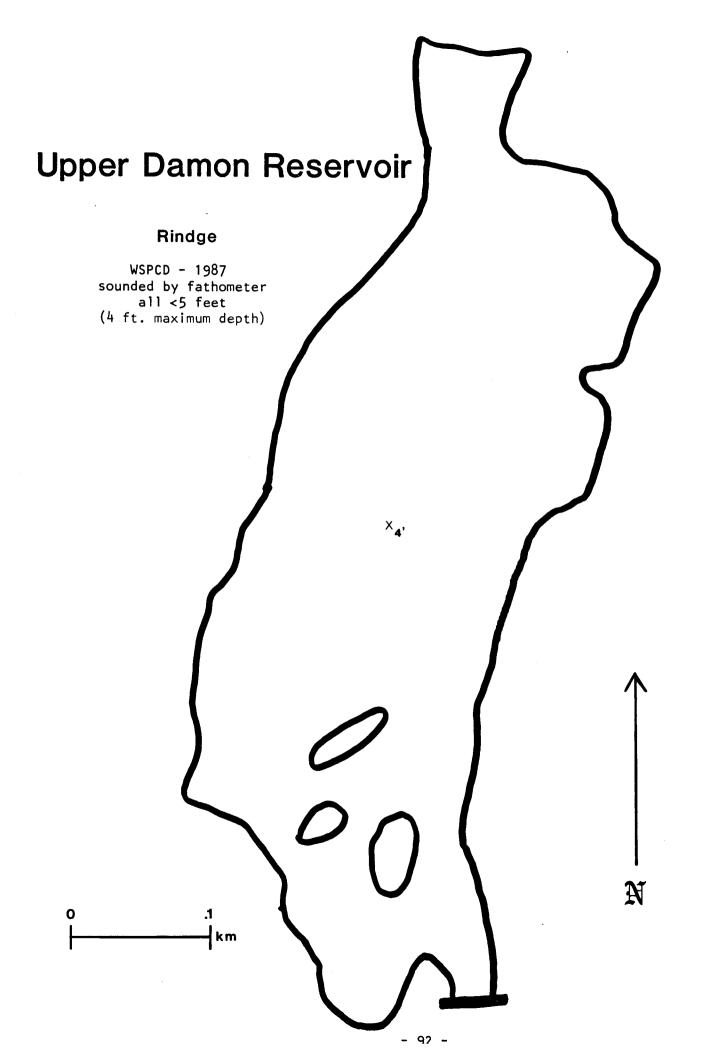
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1987

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	3	2	3	8	Eutro.

#### **COMMENTS:**

- 1. Green algae made up 75% of the whole-water phytoplankton. Tiny green flagellates (40%) and Ankistrodesmus (15%) were the dominant genera.
- 2. Water was a dark tea color.
- 3. No winter or summer net plankton samples were collected because the water depth was too shallow.



#### FIELD DATA SHEET

LAKE: DAMON RESERVOIR, UPPER

TOWN: RINDGE

DATE: 09/09/87

WEATHER: PARTLY SUNNY

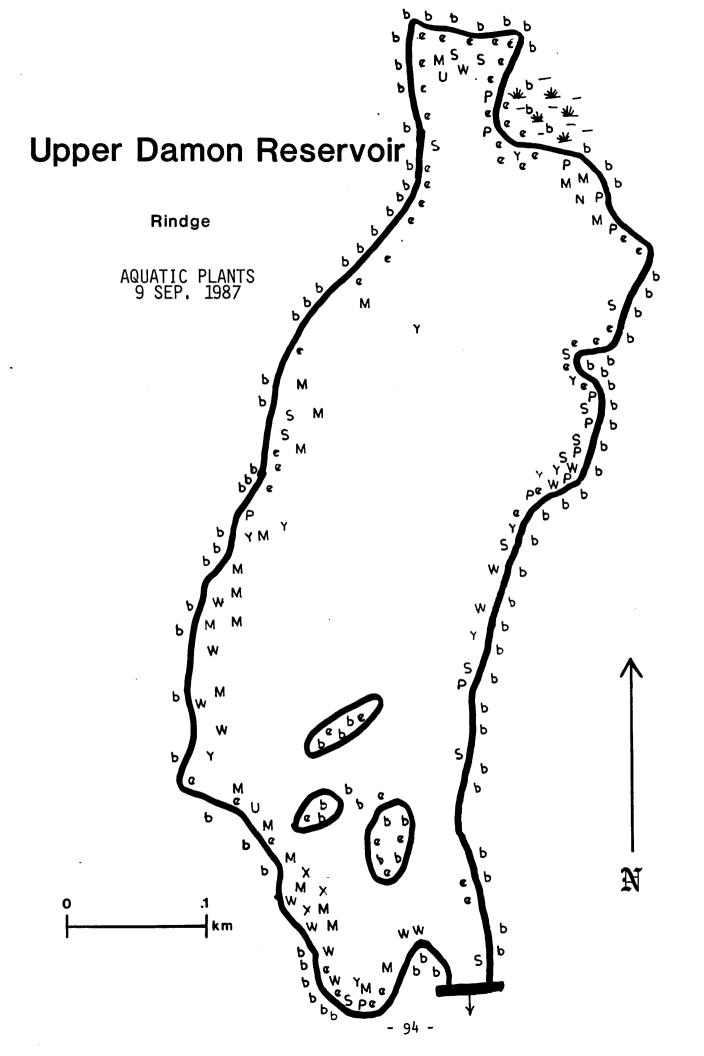
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	22.3	7.9	89 %
1.0	19.7	6.1	66 %

SECCHI DISK (m): 1.2 COMMENTS:

BOTTOM DEPTH (m): 1.3

TIME: 1235

\*Dissolved oxygen values are in mg/L



#### AQUATIC PLANT SURVEY

LAKE: DAMON RESERVOIR, UPPER TOWN: RINDGE DATE: 09/09/87

Key	PLANT	ADUNDANCE	
Ney	GENERIC	COMMON	ABUNDANCE
W	Potamogeton	Pondweed	Common
М	Myriophyllum humile	Water milfoil	Common
Ь	Scirpus	Bulrush	Common
Υ	Nuphar	Yellow water lily	Sparse
S	Sparganium	Bur reed	Sparse
е	Eleocharis	Spike rush	Common
X	Sphagnum	Peat moss	Sparse
N	Nymphaea	White water lily	Sparse
Р	Pontederia cordata	Pickerelweed	Scattered
U	Utricularia	Bladderwort	Scattered

OVERALL ABUNDANCE: Common

#### **GENERAL OBSERVATIONS:**

- 1. Submerged milfoil and pondweeds were very common along much of the shoreline and out into the pond. Other plants were confined primarily to the immediate shoreline.
- 2. Both Scirpus validus and S. cyperinus were present.